DOCUMENT RESUME

ED 215 046 UD 022 203

AUTHOR Genova, William J.
TITLE Case Studies of Three Urban University-School Collaboratives Mandated for the Improvement of Educational Practice. Executive Summary.
INSTITUTION TDR Associates, Inc., Newton, Mass.
SPONS AGENCY National Inst. of Education (ED), Washington, D.C.
PUB DATE Oct 81
CONTRACT 400-79-0064
NOTE 18p.; For related documents, see UD 022 201-202.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *College School Cooperation; Community Involvement; *Cooperative Programs; Educational Cooperation; Educational Facilities Improvement; *Educational Improvement; Elementary Secondary Education; *Improvement Programs; *Information Utilization; Instructional Improvement; *Organizational Communication; Organizational Theories; Systems Analysis
IDENTIFIERS *Boston Public Schools MA

ABSTRACT

This is the Executive Summary of a 1979-81 study of factors and conditions that affect the exchange and use of knowledge for school improvement in three collaborative systems in which a college/university was paired with one or more public schools in Boston, Massachussetts. The pairings were among 26 such collaborative arrangements mandated by court order in 1975 as part of Boston's desegregation program. This summary is based on a two-volume final report, Volume I being a cross case analysis based on case studies of the three systems contained in Volume II. The method used to examine how school improvement ideas are effectively put into practice through interorganizational collaboration focused on projects being implemented within each of the paired systems. Analysis showed that knowledge exchange/use for school improvement in these interorganizational systems was governed largely by an interaction of the systems' structural arrangements, their history and environment, interorganizational processes, and the hierarchy of needs and resources. The study found that knowledge flow was largely dependent on personal interaction rather than on written communication, and the predominant type of educational knowledge often exchanged was situational in nature, although there was also a flow of craft knowledge and research knowledge. (MJL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
William J. Genova
TDR Associates, Inc
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED215046

TDR Associates, Inc. Training/Development/Research

EXECUTIVE SUMMARY

Case Studies of Three Urban University-School Collaboratives Mandated for the Improvement of Educational Practice

Prepared for the:
National Institute of Education

Prepared by:

TDR Associates, Inc.
October, 1981
Contract #400-79-0064

UD 022 203

385 Elliot Street, Newton, Massachusetts 02164 / (617) 969-0651

Abstract

This 1 1/2 year study (1979-1981) examined factors and conditions affecting the exchange and use of knowledge resources in three (of twenty-six) larger and more complex Pairings of colleges/universities and the Boston Public Schools, mandated by court order in 1975 as part of Boston's desegregation case. It was found that knowledge exchange/use for school improvement in these complex interorganizational arrangements (collaboratives) is governed largely by an interaction of: their structural arrangements; their particular history and environment; several, staged inter-organizational processes; and a discrete hierarchy of needs and resources (with parallel risk and impact levels).

These Pairings were found to be highly person-dependent (versus product-dependent), in which individual advocacy, networking and verbal exchange are the primary modes of cost-ineffective initiation, knowledge flow, and knowledge use. The predominant type of educational knowledge flow/use was found to be situational knowledge first (47%-53%), craft knowledge second (36%-41%), and research knowledge third (5%-16%). In the Pairings surprisingly little use was made of available federal/state/private R & D products for school improvement. Absence of sufficient feedback/altering mechanisms as a design flaw in the structual apparatus of the Pairings, was identified as the major barrier to moving beyond mid-level functioning and impact.

INTRODUCTION

This is the Executive Summary of a study of factors and conditions affecting the exchange and use of knowledge resources in three (of twenty-six) pairings of colleges/universities and the Boston Public Schools, mandated by court order in 1975 as part of Boston's desegregation case. The eighteen-month study of these (continued) operational pairings was conducted between 1979-1981 by TDR Associates, Inc., of Newton, Massachusetts, under a contract with the National Institute of Education. The full report is presented in two volumes. Volume I is a cross-case analysis, based on the three case studies contained in Volume II.

The study of knowledge exchange and use for school improvement becomes especially important in the face of cutbacks in staffing and budgets. A major assumption of inter-organizational collaboration is that more can be done with "pooled" resources than by the partners alone. In this study of the exchange and use of knowledge resources, we are particularly interested in how school improvement ideas are effectively put into practice through such collaboration.

The three colleges/universities studied were chosen because of their relatively large and complexity (each is paired with a school district), and because of our familiarity with them. Separate case studies were each conducted and written by three experienced fieldworkers, who also had some "inside" affiliation with the pairing which they studied. Controls on bias included comparisons of several key-respondent perspectives on the same topics/issues and case analysis and writeup reviews by other staff, consultants, and people associated with the pairings. In addition, the final cross-case analysis and conceptual model were developed by staff who were minimally involved in the three case studies.

KNOWLEDGE FLOW/USE FOR SCHOOL IMPROVEMENT

In the Pairings many University/College, school, and community people came together around primarily discrete, small-scale projects. With a combination of state and local funding and other resources, with a combination of paid and contributed time, attention was focused primarily on school-defined needs (listed in order of historical occurrence)--expanded access to facilities and materials; added personnel for direct services to students; improved practices such as in curriculum and instruction; and (least occurring) enhancing the school's self-improvement capabilities.

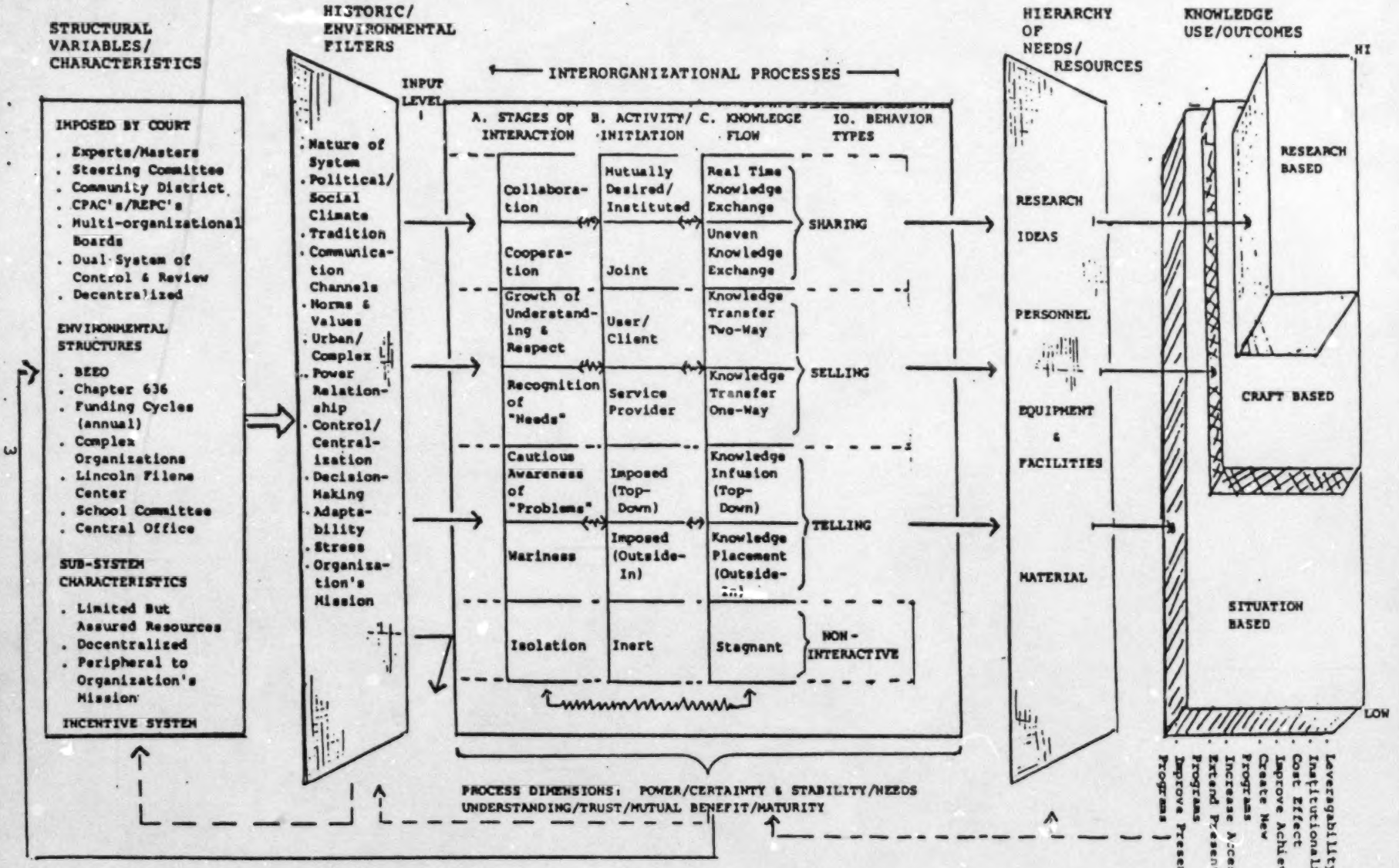
In planning and implementing such projects, considerable time was spent by the University/College-school-community participants in talking together and separately about the problem, and ideas about improvement. In Figure 1 (p. 3) we characterize these and other "inter-organizational processes" on four normative scales, each related to lower-to-higher levels of knowledge flow/use for school improvement. Using this model a major conclusion of the study is that the three Boston Pairings are governed primarily by their structural characteristics and setting, and have more-or-less stabilized at the mid-range in the model. At this mid-range we find that:

- the predominant <u>mode</u> of knowledge flow/use is through verbal face-to-face interaction, with very little use of written materials, such as the available products of federal/state/private R & D programs and agencies;
- the predominant <u>type</u> of educational knowledge flow/use is situational knowledge first (47%-53%), craft knowledge second (36%-41%), and research knowledge third (5%-10%);[1]
- knowledge flow/use by <u>role</u> found school (experience based) staff contributing mostly situational then craft knowledge, and University/College staff contributing mostly craft than research knowledge;

---

[1] See page 14.

FIGURE 1: Conceptual Model of Inter-organizational Arrangements For Knowledge Utilization in Urban Settings



- the directionality of the knowledge flow/use was more often two-way exchange between University/College and school participants in the case of the most research-oriented University/College, and more one-way (University/College to schools) in the more service-oriented University/College;

- the content area of the knowledge flow/use (e.g., basic skills, physical education, multicultural) does not appear to affect either the mode, type, role, or directionality of knowledge flow/use;

- the level of need addressed does affect knowledge flow/use, with experience based and research based knowledge being used, respectively, concerning access to facilities and materials, added personnel for direct services to students, improved practices, and enhancing the school's self-improvement capacities; and

- the setting does affect knowledge flow/use, with school staff more tolerant of research based knowledge if presented by University/College staff in workshops/seminars at the University/College setting. At the school site, school staff expect (and use) more experience based knowledge, but resist research knowledge.

To varying degrees knowledge was used in the Pairings, and some school improvement was achieved. By locating these accomplishments and associated processes "at mid-range" in our model, we do not intend to denigrate their importance. Given the setting, the ambiguity of the Pairings, and the structural limits, the Pairing participants inched their way to mid-range from the very bottom of the model. In itself this steady progression is a major accomplishment. What the model suggests, however, is that future progress toward higher levels of knowledge flow/use is possible, but will require alterations in critical aspects of the entire apparatus.

High levels of knowledge flow/use would involve more extensive adoption and adaptation of federal/state/private R & D products to upgrade school practices, and to enhance the school's improvement capabilities. In the Pairings there is surprisingly little evidence of use of such R & D products; almost none, actually. With only one or two exceptions

in our cases, the Pairing participants did not actively search for available R & D products, nor did the purveyors of such products try to disseminate their wares to the Pairing participants.

Available R & D products, if sought or disseminated, may not have applied exactly to many situations/needs in the Pairings. However, the predominance in the Pairings of locally developed, custom-tailored improvement activities derived through extensive discussion and negotiation was certainly labor intensive and therefore highly cost ineffective. Clearly there was not a parsimonious "leveraging" of scarce (and declining) resources. Furthermore, locally developed improvement activities were mostly short-lived, and seldom disseminated to other classrooms, schools, or districts beyond their sites of origin.

The current arrest (equalibrium in the Pairings at this mid-range in our model) of localized knowledge flow/use is more-or-less "explained" by our conceptual model, which links structure, environment, and inter-organizational processes to the nature and extent of knowledge flow/use. A major assumption of the model, which certainly warrants future testing under more controlled conditions, is that higher levels of knowledge flow/use will follow: by making key structural changes in the inter-organizational arrangements; through more effective responsiveness to critical historic/environmental "filters" affecting the Pairings; and by altering the complexion of at least three types of inter-organizational processes toward more "true" collaboration and mutual exchange.

EFFECTS OF STRUCTURE

It cannot be over-emphasized that the Boston Pairings studied were mandated by Court-order, establishing a large, complex network of structures to promote involvements among not only the paired Universities/

Colleges, schools, and parent/citizen groups, but also a large "super-structure" as well (e.g., the Court, the Massachusetts Department of Education, State and Boston Chapter 636 Funding Administration, the Boston School Committee, the Boston Mayor's Office, and the College/University President's Steering Committee). In this context, the Pairing participants were charged to jointly plan and execute projects and activities which they felt were needed to upgrade the quality of education and enhance equity in Boston--an achievement viewed by the Court and its planners to be key to successful school desegregation over the long haul.

Armed with this global mandate, few procedural guidelines, nothing said explicitly about "knowledge use", and some prior histories of piece-meal collaboration, the Pairing participants worked their way over a five-year period. They moved from stages of mutual suspicion and wariness to some cooperative planning, but mostly bargaining and trading. Initially, the Chapter 636 Funding of discrete, one-year projects provided structure and relative certainty within a highly ambiguous (unspecified) arrangement. Chapter 636 Funding required written proposals which were to include a needs assessment, objectives, activities and timetables, a detailed budget, and a budget rationale. Given such required specificity, initially wary and suspicious "partners" had a means to see that anything "slippery" would be spotted and blocked in advance. However, as time progressed and as the Pairing participants became more trustful, experienced, and involved, they were increasingly frustrated by the very structures which got them started. Their deepening understanding of what was needed, and their widening vision of the possibilities for school improvement, often went beyond the limits

of the structure (i.e., fixed funding cycles; cumbersome administrative procedures; requirements to adhere to the initial project specifications, even when alterations proved necessary). Thus, from our cross-case analysis of the effects of structure on knowledge flow/use for school improvement, we conclude that higher-order functioning will require that:

- those with power to alter the structural arrangements and requirements must be involved in monitoring progress, and in periodically refining the apparatus, where warranted, over time;
- given assumptions of powerlessness which naturally develop in Pairing participants within an ambiguous court-mandated arrangement, participants tend to lower their sights and adjust to structural limitations, rather than press for needed structural change;
- the key roles for setting direction and exerting influence in the Pairings toward higher-level functioning are powerful advocates and linkers, and these roles can be enacted by people in a variety of staff and administrative positions in the Pairings and their superstructures;
- the most critical positions in the Pairings for facilitating cooperative (and eventually collaborative) planning and action are University/College and school coordinators;
- year-long, terminal projects satisfy some needs for short-term outcomes, expected especially by school staff and parent/citizen groups;
- to satisfy the short-term needs of school staff and parent/citizen groups, short-term projects should be designed as part of long-termed programs for cumulative effect and higher-order functioning;
- overall, parent/community group involvement in the Boston Pairings was primarily ceremonial, despite many efforts to the contrary;
- a characteristic fragmentation ("loose coupling") of subunits in schools and Universities/Colleges requires frequent and multiple communications regarding Pairing projects and activities for their spread (leveraging) across subunits;
- a predominant type and focus of the University/College (i.e., research, teaching, service) affects the emphases of the Pairing project and activities, and hence the nature and extent of knowledge flow/use for school improvement; and

. inadequate and inappropriate incentives (including money) for most participants have and continue to be a major barrier to project and activity involvement, and attention to knowledge flow/use.

These structural factors were inherent in the design of the Pairings at the outset. Most project participants simply assumed that since they were enmeshed in a Court-order, that they were forever set in stone. With each group of participants assuming low power for themselves, few made any sustained effort to test where the apparatus could be altered in line with what experience and hindsight suggested. This led to a "rule of the least common denominator", in which participants adjusted their vision, down, to fit within the structural limits. Had the Court and its planners extended their role into long-term monitoring and evaluation of the effects of the structure which it created, needed refinements may have kept apace with the steady progression toward higher-order knowledge flow/use for school improvement achieved by the Pairing participants. Without that capacity the progression came to equilibrium (at mid-range in our model), as vision and effort gave way to the weight of what came to be more and more of a structural yoke.

. EFFECTS OF HISTORY AND ENVIRONMENT

Taken together the Court's desegregation plan and Pairing plan created a major upheaval for the Boston Public Schools and its constituent groups. At its worst it meant to some (the dreaded) forced busing and school system decentralization, with all the confusion and stress which such changes typically engender. To others it meant an opportunity to break set, to get out of the rut of segregation, inequity, and poor quality education. The Pairings could become a counter-foil to the perceived ills of desegregation, given the positive nature of their charge to upgrade education and promote equity.

However, many Boston staff resented what they saw in the plan as a slap-in-the-face; a strong suggestion of their incompetence and inertia. Many were proud of their prior efforts and accomplishments, and were profoundly insulted by this undertone of the Court's actions. Many University/College professors held long-standing stereotypes and biases against the Boston Public Schools, and thus entered the Pairings with an air of condescention. These initial attitudes were conditioned by history and the new environment (i.e., desegregation, decentralization, the pairings), and the effects of such "filters" continue to influence the nature and extent of knowledge flow/use for school improvement in the Pairings. From our cross-case analysis, we conclude that:

- in the initial stages (1-2 years) of mandated inter-organizational arrangements which involve such major changes, participants will devote considerable time and energy vying for power and influence in an ambiguous environment, and will tend to engage in projects and activities with minimal risk (e.g., access to facilities and materials);

- parental/community support for the Pairings will be very difficult to obtain when the Pairings are an integral part of an emotionally charged, Court-ordered desegregation;

- the colleges/universities, especially, must avoid taking too much credit for the Pairings' achievement, as this will further antagonize school and community participants;

- within a context of desegregation, projects and activities which gain the most public support are the "basics" (e.g., reading, mathematics), and the least popular (which were avoided in the Pairings) would involve direct race relations work; and

- collaborative/cooperative involvement between the paired colleges/universities and schools prior to the Pairings accelerates and supports the Pairing's operations and accomplishments.

In contrast to other components in our model, such historic filters are fixed and unalterable. Furthermore, little conscious attention is given to historical and environmental factors--the Pairing participants become quickly absorbed with projects, activities, funding, power, and

the like. However, to achieve higher-order knowledge flow/use for school improvement, the Pairing planners and participants need to become more sensitive to the effects of the particular history and environment of their setting. By developing more effective strategies to deal with the issues involved, the negative impact of history and environment can to some extent be reduced.

. EFFECTS OF INTER-ORGANIZATIONAL PROCESSES

Given the nature of the structure, historic/environmental filters, and hierarchy of needs/resources discussed above, the Pairings eventually settled (after five years) into a process pattern (equalibrium) as inter-organizational arrangements. In our conceptual model we describe three sets of inter-organizational processes, ordered from low-to-high-order functioning (bottom-to-top, respectively) in several stages, as shown in Figure 1 (p. 3).

Collectively these processes settled into an equalibrium at about mid-level functioning, with variations as described in the following conclusions:

- the predominant current stage of interaction in the Pairings is negotiation (interaction leading to a growth of understanding and respect), which is just short of institutionalized cooperation and collaboration because it typically involves new initiatives by one Pairing group;

- the initiation of activities in the Pairings is mixed, with the schools assuming the role of client (user) and the Universities/Colleges acting as services providers;

- the pattern of knowledge flow/use varies considerably, depending on the type of knowledge, and other process dimensions such as power, certainty, stability, needs, understanding, trust, perceived mutual benefit, and maturity (vis a vis problem-solving) of the participants; and

- the predominant type of inter-organizational behavior in the Pairing involves one participant group trying to "sell" other groups on ideas, projects, and activities.

In one sense this pattern of inter-organizational processes is surprisingly consistent across the three Pairings studied, with some minor variation attributed mainly to differences in the three Universities/Colleges involved. That consistency is understandable, however, given that the three Pairings share a common structure, history and environments, and needs/resources. As with these other factors, the inter-organizational processes described herein have an effect on the nature and extent of knowledge use for school improvement. Likewise, our conceptual model predicts that higher-order knowledge use for school improvement will result from higher-order functioning of these inter-organizational processes--institutionalized collaboration which is mutually desired and instituted, with knowledge exchange through a mutual sharing of ideas and resources among participant groups aimed at knowledge use for school improvement.

EFFECTS OF HIERARCHY OF NEEDS/RESOURCES

As stated earlier, the Pairings showed a definite hierarchy in the underlying needs to which projects and activities (resources) were applied. From lowest-to-highest order of needs re rces (in terms of knowledge flow/use), we have described: expanded access to facilities and materials; added personnel for direct services to students; improved practices such as in curriculum and instruction; and (least occurring) enhancing the school's self-improvement capabilities. Movement up this hierarchy did occur over time as trust and understanding improved, to overcome the greater risk associated with efforts to improve practices and self-improvement capabilities. In our cross-case analysis, we conlcude that:

- matching school needs with college/university resources requires a detailed knowledge of the school situation, to insure that concerns and expectations are fully understood;

- school people and especially parents and community leaders often assumed that the resources of the "rich" colleges and universities were limitless and available, and that to pay for them constituted a "rip-off";

- evidence of knowledge flow/use increases as we move up the hierarchy of needs/resources applied to the Pairings' projects and activities;

- viewing themselves as clients to be served, school people came to expect college/university staff to do things for, more often than with them; and

- in most cases school people wanted additions to or refinement in their existing operations--few were interested in fundamental change or renewal.

These and other aspects of the hierarchy of needs/resources applied in the Pairings' projects and activities also affect the nature and extent of knowledge flow/use for school improvement, as does structure, history/environment, and inter-organizational processes. Actually, our conceptual model implies a complex interaction of all these factors on each other, as well as on the outcome of knowledge flow/use.

. KNOWLEDGE FLOW/USE IN RETROSPECT

We would like to underscore a conceptual and methodological difficulty that we encountered by treating knowledge as either experience based (situational and craft), or research based. On the surface these "types" of knowledge seem distinguishable. In operation, however, they blur together and overlap to such an extent as to suggest that they are fused into something of a Gestalt. For example, as college/university and school staff talk about a particular classroom or school situation ("situational knowledge"), their selection and characterization of meaningful episodes is guided by their accumulated practical experience ("craft knowledge"), and in the case of many college/university staff

especially, possibly influenced by (a less discernable) cummulative, "stored" experience in and reading of studies on or related to the topic at hand ("research knowledge"). What is expressed in verbal exchange, and hence open to observation, may be merely the tip of the knowledge iceberg. Even when asked, participants find it difficult to classify their thoughts so neatly.

Our difficulties in tracking what may be artificially distinct knowledge categories may in part be an artifact of the predominant mode of knowledge flow/use in the Pairings, namely face-to-face, verbal interaction. It may be simpler to establish the derivation of more conventionally studied R & D products, such as innovative programs or curriculum packages. But even then, we are studying the products of human thought and learning, in which ideas and memory are interwoven in little-understood patterns. It is useful to categorize "types" of knowledge for analytic purposes, but a danger in this artificial atomization is that we may loose sight of their Gestalt.

Through this study of three very complex inter-organizational arrangements, we have come to appreciate more the difficulties involved in conceptualizing and tracking this phenomenon called knowledge flow/use for school improvement. Next time around we hope to sharpen our approach to this problem, and we encourage others to delve deeper into this knotty epistemological issue. One useful direction would involve in-depth interviewing with participants in such inter-organizational arrangements to better understand <u>their</u> phenomenological conceptions of knowledge flow/use. How conscious are they of these phenomena? Do they find such distinctions useful? Can they be trained to be better translators of ideas into practice? Thus, more direct probing of the outcome

dimension of this study is called for in future research, before more study of the factors and conditions which affect that outcome--knowlege flow/use for school improvement.

Footnote

[1] In general, there are two sources for knowledge which we consider in the following analysis:

- Research Based Knowledge - information on education or utilization processes obtained directly or indirectly (from books, reputable experts, etc.) from disciplined, scientific inquiry. Its assertions concerning education practice and knowledge processes are based on "objective" evidence.

- Experience Based Knowledge - information on education or utilization processes derived primarily from practice, which we have further divided into two sub-categories:

  - Craft Based Knowledge - information or assertions derived primarily from the accumulated and articulated experience of practitioners, and relies heavily on the attributed common sense and trustworthiness of the person(s) asserting it.

  - Situational Knowlege - information or assertions about educational practice and the transfer of knowledge which comes from familiarity with a concrete situation and consists of statements about the situation; it is not proposed as generalizable beyond that setting (in contrast to craft knowledge, which is offered as generalizable).